

Serial No.: 10/647,889
Submission Dated March 8, 2005
Reply to Office action of December 8, 2004.

122897-1

Amendments to the Specification

Kindly replace paragraphs [0008] and [0047] with the following replacement paragraphs.

[0008] In one embodiment the invention is a method for preparing an aromatic polyether polymer which comprises contacting, in a solvent of low polarity, substantially equimolar amounts of at least one alkali metal salt of a dihydroxy-substituted aromatic hydrocarbon and at least one bis((N-(chlorophthalimido))-aromatic compound, in the presence of a phase transfer catalyst which is substantially stable at the temperatures employed; said method further comprising at least one of the following embodiments:

- (A) employing substantially dry solvent, alkali metal salt and bis(N-(chlorophthalimido))aromatic compound such that the reaction mixture comprising the same contains at most about 20 ppm by weight of water;
- (B) starting the reaction by addition of phase transfer catalyst wherein the polymer solids level in said solvent is at a value of at least about 15% and then concentrating the mixture during reaction until the said value is in the range of between about 25% polymer solids level and about 60% polymer solids level;
- (C) maintaining the combined level of said alkali metal salt and bis(N-(chlorophthalimido))aromatic compound in said solvent at a value in the range of between about 25% polymer solids level and about 60% polymer solids level;
- (D) beginning said contact using a molar excess of said bis(N-(chlorophthalimido))aromatic compound up to about 5% and subsequently adding alkali metal salt at least once to afford a polyether polymer of a desired molecular weight;
- (E) employing alkali metal salt having less than about 25% of particles with a diameter of greater than about 200 [nm]microns; and
- (F) employing at least one of

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(1) an alkali metal salt which is stoichiometrically pure or contains at most about 0.3 mole % of free dihydroxy-substituted aromatic hydrocarbon or of free sodium hydroxide, and

(2) a bis(N-(chlorophthalimido))aromatic compound which is stoichiometrically pure or contains excess anhydride groups in a proportion up to 0.5 mole %, contains phthalides in a proportion no greater than about 1000 ppm, and contains chlorobenzoic acids in a proportion no greater than about 0.15 mole %.

[0047] In embodiment E, the presence of particles of a diameter greater than about 200 microns is avoided, causing a substantial increase in molecular weight over time. The percentage of particles with diameter greater than about 200 [nm]microns is in one embodiment less than about 30%, in another embodiment less than about 25%, and in still another embodiment less than about 20% of the total particles. In other embodiments the percentage of particles with diameter greater than about 500 [nm]microns is in one embodiment less than about 5%, in another embodiment less than about 2%, and in still another embodiment less than about 1% of the total particles. In a particular embodiment the percentage of particles with diameter greater than about 200 [nm]microns is less than about 25%, and the percentage of particles with diameter greater than about 500 [nm]microns is less than about 1%. In one embodiment the desired particle size range may be achieved by using commercially available grinders or their art-recognized equivalents, either during or after preparation of the alkali metal salt, to reduce particle size in the salt as required.